



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,988	10/18/2004	William E. Melander	A4-1854	5987
27127	7590	02/07/2005	EXAMINER	
HARTMAN & HARTMAN, P.C. 552 EAST 700 NORTH VALPARAISO, IN 46383			GONZALEZ, MADELINE	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/711,988

Applicant(s)

MELANDER, WILLIAM E.

Examiner

Madeline Gonzalez

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garzione (U.S. 4,322,888).

Garzione discloses a gauge, as shown in Fig. 5, having:

- a housing 52;
- means for supporting the housing 52 on a surface of a cylindrical body (the means for supporting could be a user's hand) while the cylindrical body is oriented so that its longitudinal axis is approximately horizontal;
- first measurement means 96 movably supported by the housing 52 so that the position of the first measurement means 96 can be altered in a lateral direction approximately perpendicular to the longitudinal axis of the cylindrical body, the first measurement means 96 being adapted for sensing a first surface point 24 of the cylindrical body laterally spaced apart from the housing 52 and disposed in a cross-sectional plane of

Art Unit: 2859

the cylindrical body, the first surface point 24 defining a terminal of a chord 30 lying in the cross-section plane of the cylindrical body;

- second measurement means 136 mounted to the housing 52 for contact with a second surface point 28 of the cylindrical body disposed in the cross-sectional plane of the cylindrical body, the second surface point 28 defining a location along the length of the chord 30;
- means for determining the radius of curvature 20 of the cylindrical body based on the length and height of the chord 30 ascertained from first and second outputs of the first and second measurement means 96 and 136, respectively;
- wherein the housing 52 is positioned on the cylindrical body while the cylindrical body is oriented so that the longitudinal axis of the cylindrical body is approximately horizontal, the second measurement means 136 is positioned approximately top-dead-center on the cylindrical body and the chord 30 is horizontal so that the second surface point 28 locates the midpoint of the length of the chord 30, the length of the chord 30 being ascertained by the position in the lateral direction of the first measurement means 96 relative to the second measurement means 136;
- wherein the radius of curvature of the cylindrical body is determined based on the formula

$$R = \frac{\left(\frac{1}{2}C\right)^2 + P^2}{2P}$$

Art Unit: 2859

where R is the radius of the cylindrical body, C is the length of the chord, and P is the perpendicular length from the chord to the intersection with the radius of curvature (height of the chord); and

- wherein the support means enables the gauge to travel along a longitudinal length of the cylindrical body.

Garzione lacks the means for determining the diameter of the cylindrical body.

With respect to the means for determining the diameter of the cylindrical body: Garzione discloses a gauge for determining the radius of curvature of a cylindrical body. It is well known in the art that the diameter of a cylindrical body is two times its radius. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to determine the diameter of the cylindrical body disclosed by Garzione by multiplying by two the radius determined with the formula disclosed above since it is well known in the art to determine the diameter of a cylindrical body using such relationship between radius and diameter.

With respect to the method steps: The method steps will be met during the normal operation of the gauge stated above.

Art Unit: 2859

3. Claims 3, 4, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garzione (U.S. 4,322,888) in view of Caron et al. (U.S. 4,729,174) [hereinafter Caron].

Garzione discloses all the subject matter claimed above in paragraph 2 with the exception of a computer programmed to determine the diameter of the cylindrical body, and means for transmitting the first and second outputs to the computer.

With respect to the computer programmed to determine the diameter of the cylindrical body and the means for transmitting the first and second outputs to the computer: Caron discloses a gauge 10 to measure means radius of a curved surface, as shown in Fig. 2, having a data station 50 (computer) outside the platform 12 for calculating the radius of curvature and cables, as shown in Fig. 5, as means for transmitting the outputs of the measurements taken with the gauge 10 to the data station 50 (computer). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a computer to analyze the measurement data as taught by Caron to the gauge disclosed by Garzione in order to calculate the diameter more easily since the computer can be programmed with the formula to determine the diameter.

With respect to the method steps: The method steps will be met during the normal operation of the gauge stated above.

Art Unit: 2859

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garzione (U.S. 4,322,888) in view of Wachtler (U.S. 5,052,121).

Garzione discloses all the subject matter claimed above in paragraph 2 with the exception of sensing a temperature of the cylindrical body.

With respect to sensing the temperature of the cylindrical body: Wachtler discloses a measuring device 10 for measuring the diameter of a workpiece, as shown in Fig. 1, having a temperature sensor 18 for sensing the temperature of the workpiece, said device 10 calculates a temperature-compensated diameter measurement. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a temperature sensor as taught by Wachtler to the gauge disclosed by Garzione in order to permit the user to calculate a diameter measurement considering deviations due to thermal expansion.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

Art Unit: 2859

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 9-14 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 10-15 of prior U.S. Patent No. 6,820,347. This is a double patenting rejection.

Allowable Subject Matter

7. Claims 6-8 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mellander discloses a device having an arm 16 with graduations and an arm 38 mounted to said arm 16. Helmricks, Face, Bellwood, Kohler, Hainneville, Price, and Eckhardt disclose devices to measure dimensions of cylindrical objects.

Art Unit: 2859

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeline Gonzalez whose telephone number is (571) 272-2243.

The examiner can normally be reached on Monday-Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MG



Diego F.F. Gutierrez
Supervisory Patent Examiner
Technology Center 2800

CHRISTOPHER W. FULTON
PRIMARY EXAMINER